

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002517**Date Inspected:** 07-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2330**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No			
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG/Tower				

**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Erik Prue was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Bay 1: QA inspector performed ultrasonic testing (UT) verification before ZPMC Quality Control (QC) UT inspections on partial penetration joints of the deck panels DP-112-002 to the U-Rib weld joints #1 and #3, and DP461-001 weld joints #4 and #5. QA UT inspected 15% of the total weld length of each weld joint. QA Inspector found lack of penetration indications that results in depth of penetration less than the minimum of 9.6 mm required on weld joints for both deck panels. For details on UT inspections see modified TL-6027 UT Inspection reports dated 07 May, 2008.

Bay 3: QA Inspector was informed by ZPMC QC Inspector Wang Lu that ABF Inspector Lu Xian Ling was monitoring FCAW tack welding on Bottom Plates BP088-001-049 and BP142-001-049 and noticed cracked tack welds. ABF Inspector asked ZPMC welder what he was going to do to fix the cracked tack welds. ZPMC welder did not believe the tack welds were cracked. QA Inspector arrived and verified that there were four (4) cracked tacks on BP088-001-049 and one (1) cracked tack on BP142-001-049. ZPMC QC Inspector informed QA Inspector that cracked tack welds would be removed by grinding and verify removal by magnetic particle (MT) inspection. ABF and QA Inspectors agreed that this is an acceptable repair to cracked tack welds. ZPMC, ABF and QA Inspectors witnessed grinding of cracked tack welds and MT inspection. Tack welds on bottom plates were found acceptable by ZPMC, ABF, and QA Inspectors.

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## WELDING INSPECTION REPORT

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### Summary of Conversations:

No significant conversations this day.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowry, 858 344-2712, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prue,Erik	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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